

-- 59. A method of addressing the problem of clotting in idle ingress and egress companion unobstructed catheter tubes indwelling within a vessel of a medical patient, comprising the acts of:

advancing a deflated balloon along an entirely hollow and unobstructed lumen of each idle ingress and egress catheter tube to a position at least partially radially within a distal end of each;

B1 inflating the respective balloons to radially span cross sectionally the lumen and radially contiguously engage, close, seal and occlude the lumen at the distal end of each catheter tube, thereby preventing blood infiltration and clotting by denying blood access to the entirely occluded lumen of each catheter tube. - -

-- 60. A method according to Claim 59 further comprising the act of purging the hollow interior of one or both catheter tubes in a proximal-to-distal direction with a suitable liquid under pressure prior to the inflating act. - -

-- 61. A method according to Claim 59 further comprising the act of purging the hollow interior of one or both catheter tubes after the inflating act, the pressure of the purging liquid temporarily deforming and unsealing the inflated balloon. - -

-- 62. A method according to Claim 59 further comprising acts of deflating both previously inflated balloons to eliminate the occlusion of each lumen and causing ingress and egress flow through the respective lumens of the catheter tubes. - -

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-- 63. A method according to Claim 62 further comprising an act of withdrawing the balloons along the lumens of the catheter tubes after the deflating act and before the causing act. - -

-- 64. A method of addressing the problem of clotting in a catheter tube indwelling within a vessel of a patient comprising the acts of:

terminating flow along a hollow interior passageway of the indwelling catheter tube;

after the terminating act, inflating a balloon to contiguously engage, close and seal the hollow interior passageway at a distal end of the indwelling catheter tube to deny blood in the vessel access to the hollow interior thereby preventing clotting within the catheter tube;

deflating the previously inflated balloon to eliminate the occlusion of the hollow passageway and causing flow through the hollow interior passageway of the catheter tube;

withdrawing the balloon from association with the catheter tube after the deflating act and before the causing act. - -

-- 65. In combination, a catheter tube for selective flow through a hollow passageway of the catheter tube to or from a patient and a balloon selectively inflated to completely span diametrically the hollow passageway and physically contact, close, seal and occlude the entire cross section of the hollow passageway at a distal end of the catheter tube against entry of blood and other debris when flow is not occurring through the hollow passageway. - -

-- 66. A combination according to Claim 65 wherein the balloon is carried near a distal end of an inflation/deflation stem, the stem extending within the hollow passageway for substantially the full length of the catheter tube. - -

B1 -- 67. A combination according to Claim 66 wherein the stem carries distance indicia for locating the balloon at the distal end of the catheter tube. - -

-- 68. A combination according to Claim 66 wherein a seal is interposed between the catheter tube and the stem within the hollow passageway at a proximal end of the catheter tube, the stem being selectively displaceable along the hollow passageway through a central opening in the seal. - -

• -- 69. A combination according to Claim 65 further comprising a port adjacent the proximal end of the catheter tube by which a flushing liquid under pressure is selectively displaced proximal-to-distal within the hollow passageway of the catheter tube. - -

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- - 70. In combination, companion ingress and egress side-by-side non-concentric catheter tubes for selective liquid flow through a hollow passageway in each catheter tube respectively to and from the patient and a balloon associated with each catheter to accommodating selective inflation of the balloons to expand the balloon cross sectionally across the hollow passageway of the associated catheter tube to generally concurrently physically engage, close, seal and fully occlude the two hollow passageways at respective distal ends of the ingress and egress catheter tubes against entry of blood from a vessel of the patient when flow is not occurring through the hollow passageways. - -

- - 71. A combination according to Claim 70 wherein the balloons are carried near distal ends of spaced inflation/deflation stems, the stems extending respectively within the hollow passageways for substantially the full length of the respective catheter tubes. - -

- - 72. A combination according to Claim 71 wherein a contiguous seal is interposed between each catheter tube and the associated stem within the hollow passageway of said catheter tube at a proximal end of said catheter tube, each stem being selectively displaceable through a central opening within the associated seal. - -

- - 73. A combination according to Claim 72 further comprising a pathway along each catheter tube by which fluid under pressure is delivered to the associated balloon to selectively inflate and deflate the associated balloon. - -